**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) A method for adapting to changes affecting a wireless signal comprising:

instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path based on a measurement of a metric of a modulated signal attribute comprised of at least one of amplitude of the wireless signal, frequency of the wireless signal, or phase of the wireless signal;

selecting a parameter adjustment, based on the instantaneously detected motion, of at least one of: an antenna mode, a power level, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate; and

performing the parameter adjustment.

2. (Previously Presented) The method as in claim 1, wherein the detecting is performed by a mobile station.

3. and 4. (Canceled).

5. (Previously presented) The method as in claim 1, wherein the detecting is based on a signal in an automatic gain control (AGC) loop.

6. (Previously presented) The method as in claim 5, wherein the detecting is a function of a statistic of the signal in the AGC loop.

7. (Previously presented) The method as in claim 6, wherein the statistic that is used is variance.

8. (Previously Presented) The method as in claim 1, wherein the detecting is based on a phase error signal produced by at least one of a delay lock loop, matched filter, or correlator.

9. (Previously Presented) The method as in claim 8, wherein the detecting is a function of a statistic of the phase error signal.

10. (Previously Presented) The method as in claim 9, wherein the statistic that is used is variance.

11. (Previously Presented) The method as in claim 1, wherein the metric is based on a frequency error signal in a frequency control loop.

12. (Previously Presented) The method as in claim 11, wherein the detecting is a function of a statistic of the frequency error signal.

13. (Previously Presented) The method as in claim 12, wherein the statistic that is used is variance.

14. (Previously Presented) The method as in claim 1, wherein the detecting includes: comparing the metric to a threshold level.

15. (Canceled).

16. (Previously Presented) The method as in claim 1, wherein the selecting the parameter adjustment includes selecting the antenna mode, which comprises changing from directive to omni-directional.

17. (Previously Presented) The method as in claim 1, wherein the selecting the parameter adjustment includes selecting the antenna mode, which comprises changing from omni-directional to directive.

18. (Canceled).

19. (Previously Presented) The method as in claim 1, wherein the selecting the parameter adjustment includes selecting to reduce at least one of the FEC coding rate, or the number of modulation symbols, to a minimum level while maintaining the signal path.

20. (Canceled).

21. (Previously presented) An apparatus for adapting to changes affecting a wireless signal, comprising:

a processing unit configured to instantaneously detect motion of a communication device communicating the wireless signal or instantaneously detect motion of an external object in a signal path based on a measurement of a metric of a modulated signal attribute comprised of at least one of amplitude of the wireless signal, frequency of the wireless signal, or phase of the wireless signal; and

a compensator configured to make a signaling parameter adjustment, responsive to the motion instantaneously detected by the processing unit, of at least one of an antenna mode, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate.

22. (Previously Presented) The apparatus as in claim 21, configured as a mobile station.

23. and 24. (Canceled).

25. (Previously presented) The apparatus as in claim 21, wherein the processing unit is configured to detect motion based on a signal in an automatic gain control (AGC) loop.

26. (Previously Presented) The apparatus as in claim 25, wherein the processing unit is configured to detect motion as a function of a statistic of the signal in the AGC loop.

27. (Previously Presented) The apparatus as in claim 26, wherein the processing unit is configured to use variance as the statistic.

28. (Previously Presented) The apparatus as in claim 21, wherein the processing unit is configured to detect motion based on a phase error signal produced by at least one of a delay lock loop, a matched filter, or a correlator.

29. (Previously Presented) The apparatus as in claim 28, wherein the processing unit is configured to detect motion as a function of a statistic of the phase error signal.

30. (Previously Presented) The apparatus as in claim 29, wherein the processing unit is configured to use variance as the statistic.

31. (Previously Presented) The apparatus as in claim 21, wherein the processing unit is configured to detect motion based on a frequency error signal in a frequency control loop.

32. (Previously Presented) The apparatus as in claim 31, wherein the processing unit is configured to detect motion as a function of a statistic of the frequency error signal.

33. (Previously Presented) The apparatus as in claim 32, wherein the processing unit is configured to use variance as the statistic.

34. (Previously Presented) The apparatus as in claim 21, wherein the processing unit is configured to detect motion using a comparison threshold level.

35. (Previously Presented) The apparatus as in claim 21, further comprising:

an antenna having a changeable antenna mode, wherein the compensator is configured to change the antenna mode.

36. (Previously Presented) The apparatus as in claim 35, wherein the compensator is configured to change the antenna mode between directive and omni-directional modes.

37. and 38. (Canceled).

39. (Previously Presented) The apparatus as in claim 21, wherein the compensator is configured to reduce at least one of the FEC coding rate, or the

number of modulation symbols, to a minimum level while maintaining the signal path.

40. and 41. (Canceled).

42. (Previously presented) A non-transitory computer-readable storage medium containing a set of instructions for a general purpose computer, the set of instructions comprising:

a signal adaptation code segment configured to cause a processor to control a signaling path to adapt to changes affecting the signaling path,

a detection code segment configured to instantaneously detect motion of a communication device communicating the wireless signal or instantaneously detect motion of an external object in a signal path based on a measurement of a metric of a modulated signal attribute comprised of at least one of amplitude of the wireless signal, frequency of the wireless signal, or phase of the wireless signal; and

an adjusting code segment configured to make a signaling parameter adjustment, responsive to the motion detected by the detecting code segment, of at lease one of an antenna mode, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate.

43. (New) A method for adapting to changes affecting a wireless signal comprising:

instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path based on a measurement of a phase change of a modulated signal;

selecting, based on the phase change, a parameter adjustment of at least one of: an antenna mode, a power level, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate; and

performing the parameter adjustment.

44. (New) The method of claim 43, wherein the measurement of a phase change comprises analyzing a phase change adjustment signal in a delay lock loop, wherein obtaining the phase change adjustment signal comprises:

generating a reference signal;

generating an advanced replica of the reference signal and a delayed replica of the reference signal;

correlating the received signal with the reference signal as a first correlation, correlating the received signal with the advanced replica as a second correlation, and correlating the received signal with the delayed replica as a third correlation; and

determining the phase change adjustment signal by comparing the first, second, and third correlations.

45. (New) The method of claim 44, wherein analyzing the phase change adjustment signal comprises determining a statistical variance of the phase change adjustment signal, wherein the parameter adjustment depends on the statistical variance.

46. (New) The method of claim 45,

wherein determining the statistical variance comprises:

calculating a difference between the phase change adjustment signal and a delayed representation of the phase change adjustment signal;

rectifying the difference to produce an absolute value of the difference; and

producing the statistical variance from the absolute value.

47. (New) The method of claim 46, wherein producing the statistical variance from the absolute value comprises filtering the absolute value with a low pass filter.

48. (New) The method of claim 43, wherein the measurement of a phase change comprises analyzing a phase adjustment applied to an internally generated reference code used in a matched filter, wherein obtaining the phase adjustment comprises:

using the matched filter to generate a code phase correlation output by comparing the modulated signal with the internally generated reference code;

determining a location of a peak in the code phase correlation output;

detecting an early magnitude of the code phase correlation output on a first side of the peak;

determining a late magnitude of the code phase correlation output on a second side of the peak; and

determining the phase adjustment using the early magnitude and the late magnitude.

49. (New) The method of claim 48, wherein analyzing the phase adjustment comprises determining a statistical variance of the phase change adjustment signal, wherein the parameter adjustment depends on the statistical variance.

50. (New) The method of claim 49,

wherein determining the statistical variance comprises:

calculating a difference between the phase adjustment and a delayed representation of the phase adjustment;

rectifying the difference to produce an absolute value of the difference; and

producing the statistical variance from the absolute value.

51. (New) The method of claim 50, wherein producing the statistical variance from the absolute value comprises filtering the absolute value with a low pass filter.

52. (New) The method of claim 43, wherein the measurement of a phase change comprises:

comparing the modulated signal and an internally generated reference code in a correlator to produce a first series of correlations at a first time;

repeating the comparing to produce a second series of correlations at a second time; and

determining a time difference between a peak of the first series and a peak of the second series, the time difference being an estimate of the phase change.

53. (New) The method of claim 52, further comprising determining a statistical variance of the time difference, wherein the parameter adjustment depends on the statistical variance.

54. (New) The method of claim 53, wherein determining the statistical variance comprises:

rectifying the time difference to produce an absolute value of the time difference; and

producing the statistical variance from the absolute value.

55. (New) The method of claim 54, wherein producing the statistical variance from the absolute value comprises filtering the absolute value with a low pass filter.

56. (New) A method for adapting to changes affecting a wireless signal comprising:

instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path based on a measurement of a metric of a modulated signal, the measurement comprising:

generating an automatic gain control (AGC) voltage from the modulated signal;

calculating a difference between the AGC voltage and a delayed representation of the AGC voltage;

rectifying the difference to produce an absolute value of the difference; and

producing an amplitude variance from the absolute value;

selecting a parameter adjustment, based on the amplitude variance, of at least one of: an antenna mode, a power level, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate; and

performing the parameter adjustment.

57. (New) The method of claim 56, wherein producing the amplitude variance from the absolute value comprises filtering the absolute value with a low pass filter.

58. (New) A method for adapting to changes affecting a wireless signal comprising:

instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path based on a measurement of a frequency change of a modulated signal;

selecting a parameter adjustment, based on the frequency change, of at least one of: an antenna mode, a power level, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate; and

performing the parameter adjustment.

59. (New) The method of claim 58, wherein the measurement of a frequency change comprises measuring a Doppler frequency shift.

60. (New) The method of claim 59, wherein measuring the Doppler frequency shift comprises:

demodulating a modulated signal to produce a demodulated signal;

taking a derivative of the demodulated signal;

feeding the demodulated signal to a voltage-controlled oscillator (VCO); and

using output of the VCO as a measurement of the Doppler frequency shift.

61. (New) The method of claim 60, further comprising determining a statistical variance of the output of the VCO, wherein the parameter adjustment depends on the statistical variance.